

CLAIMS

What is claimed is:

1 1. A system for providing information concerning a consumer item to a user
2 comprising:
3 an object of interest (OI) identification information (OI-Id) provider, wherein the OI is a
4 consumer item and said OI-Id provider is in a specific location;
5 a portable shopping assistant (PSA) for receiving the OI-Id in the specific location and for
6 transmitting the received OI-Id;
7 an information server system (ISS) for receiving the OI-Id transmitted by said PSA, for
8 matching the received OI-Id with a record containing consumer item information (P/S-
9 Info) corresponding to the received OI-Id, for determining a communication method,
10 and for transmitting the P/S-Info using the determined communication method; and
11 an output device for receiving P/S-Info from said ISS and outputting the P/S-Info to the
12 user, said output device being separate from the PSA;
13 wherein the specific location is one of a location where the OI is present, a location having
14 material associated with the OI, and a location where an event associated with the OI
15 is taking place.

1 2. The system of claim 1, wherein, in the location where an event associated with the
2 OI is taking place, the associated event comprises one of a concert, a lecture, and a sports event.

1 3. The system of claim 1, wherein the PSA comprises one of a cellular telephone, a
2 personal digital assistant (PDA), a laptop computer, and a dedicated device.

1 4. The system of claim 1, wherein the PSA receives OI-Id by one of radiofrequency
2 (RF) communication, infrared (IR) communication, sonic communication, label scanning and
3 manual entry.

1 5. The system of claim 1, wherein the OI-Id comprises a consumer item identification
2 code.

1 6. The system of claim 1, wherein the PSA receives the OI-Id by short-range, low
2 power radiofrequency (RF) technology.

1 7. The system of claim 6, wherein the short-range, low power RF technology
2 comprises one of Bluetooth technology, IEEE 802.16 technology, and HiperLAN technology.

1 8. The system of claim 1, wherein the PSA is a cellular telephone, further
2 comprising:

3 a cellular telephone network for receiving the OI-Id transmitted by said cellular telephone
4 and for transmitting the OI-Id to the ISS.

1 9. The system of claim 1, wherein the PSA is a cellular telephone, said cellular
2 telephone being registered to receive services of the consumer item information system by having
3 appropriate information entered in a file of a subscriber database maintained by a cellular
4 telephone system.

1 10. The system of claim 1, wherein the PSA transmits the OI-Id by one of the Internet,
2 a wired telephone network, a short-range, low power radio-frequency (RF) technology, a wireless
3 local area network (WLAN), and a cellular telephone network.

1 11. The system of claim 10, wherein the short-range, low power RF technology
2 comprises one of Bluetooth technology, IEEE 802.16 technology, and HiperLAN technology.

1 12. The system of claim 10, wherein the cellular telephone network comprises a third
2 generation cellular telephone network.

1 13. The system of claim 1, wherein the ISS transmits the P/S-Info by one of the
2 Internet, a wired telephone network, a broadcast network, a short-range, low power radio-
3 frequency (RF) technology, a wireless local area network (WLAN), and a cellular telephone
4 network.

1 14. The system of claim 13, wherein the broadcast network comprises one of a digital
2 audio broadcast (DAB) system, a digital video broadcast (DVB) system, a satellite system, a
3 microwave broadcast system, and a cable television system.

1 15. The system of claim 13, wherein the short-range, low power RF technology
2 comprises one of Bluetooth technology, IEEE 802.16 technology, and HiperLAN technology.

1 16. The system of claim 13, wherein the cellular telephone network comprises a third
2 generation cellular telephone network.

1 17. The system of claim 13, wherein the ISS determines which one of the Internet, a
2 wired telephone network, a broadcast network, a short-range, low power radio-frequency (RF)
3 technology, a wireless local area network (WLAN), and a cellular telephone network is used to
4 transmit the P/S-Info.

1 18. The system of claim 1, wherein the PSA transmits OI-Id and the ISS transmits the
2 P/S-Info using different communication networks.

1 19. The system of claim 1, wherein the output device is one of a personal computer at
2 a home of the user, a television set at the home of the user, a portable laptop computer equipped
3 with communication means, and a set of portable virtual reality goggles.

1 20. The system of claim 1, further comprising:
2 a means for attaching user information (UID-Info) to the OI-Id, said UID-Info comprising
3 at least a communication destination address for the user;
4 wherein the ISS uses the communication destination address to address the P/S-Info to the
5 output device.

1 21. The system of claim 20, wherein the UID-Info attaching means is one of the PSA
2 and the ISS.

1 22. The system of claim 1, wherein the ISS comprises:

2 an OI-Id server for receiving the OI-Id, resolving a correct destination address for a P/S-
3 Info server which has the record containing the P/S-Info corresponding to the received
4 OI-Id, and transmitting a request for P/S-Info to a P/S-Info Server;
5 said P/S-Info server for receiving the request for P/S-Info, for finding the record
6 containing the P/S-Info, and for transmitting the P/S-Info;
7 means for determining a user identification (UID) of a user of the PSA;
8 a user information (UID-Info) server containing UID-Info files sorted by user
9 identification (UID) for matching a UID-Info file with said determined UID, wherein
10 the UID-Info file comprises at least a communication destination address for the user;
11 and
12 means for transmitting said P/S-Info to the communication destination address in the
13 matching UID-Info file.

1 23. The system of claim 22, further comprising:
2 a public switched telephone network (PSTN) comprising the OI-Id server, the UID-Info
3 server, and the means for determining a UID;
4 wherein the means for transmitting the P/S-Info comprises the Internet.

1 24. The system of claim 23, wherein the P/S-Info server is on the Internet and the P/S-
2 Info request and response is transmitted over the Internet.

1 25. The system of claim 1, further comprising:
2 a cellular telephone comprising the PSA;

3 a short message service (SMS) system connected to a cellular telephone system and to the
4 Internet, said cellular telephone being in a transmission area of said cellular telephone
5 system, said SMS system for receiving the OI-Id, resolving a destination Internet
6 Protocol (IP) address for a P/S-Info server which has the record containing the P/S-
7 Info corresponding to the received OI-Id, resolving a destination IP address for the
8 output device, and transmitting a request for P/S-Info containing the destination IP
9 address of the output device over the Internet to the P/S-Info server; and
10 said P/S-Info server connected to the Internet for receiving said request for P/S-Info, for
11 finding the record containing the P/S-Info, and for transmitting the P/S-Info to the
12 output device.

1 26. The system of claim 1, further comprising:

2 a Bluetooth chip comprising the OI-Id provider;

3 a mobile terminal comprising the PSA;

4 a mobile network for receiving the OI-Id from the mobile terminal and for transmitting the
5 OI-Id to the ISS;

6 the ISS comprising:

7 at least one information database for storing P/S-Info;

8 an ISS server for finding P/S-Info in the at least one information database based
9 on the received OI-Id from the mobile terminal;

10 a network connected to the ISS server for transmitting the P/S-Info;

11 at least one broadcasting provider connected to the network for transmitting the P/S-Info,
12 said at least one broadcasting provider comprising at least one of a digital audio
13 broadcast (DAB) system, a digital video broadcast (DVB) system, a satellite system, a
14 microwave broadcast system, and a cable television system; and
15 said output device comprising one of a personal computer at a home of the user, a
16 television set at the home of the user, a portable laptop computer equipped with
17 communication means carried by the user, and a set of portable virtual reality goggles
18 worn by the user;
19 wherein the ISS server stores information indexed to each user, said indexed information
20 being used by the ISS in determining the communication method and which one of the
21 at least one broadcasting provider and the network is to be used to transmit the P/S-
22 Info to the output device.

1 27. The system of claim 1, wherein the ISS further comprises:

2 a communication determination server for maintaining records concerning PSAs
3 requesting P/S-Info and output devices corresponding to the requesting PSAs, and for
4 broadcasting particular P/S-Info to output devices in a specific broadcasting area when
5 a number of output devices in the specific broadcasting area corresponding to PSAs
6 requesting particular P/S-Info exceeds a predetermined threshold value.

1 28. A system for providing information concerning a consumer item to a user
2 comprising:

3 an object of interest (OI) identification information (OI-Id) provider, wherein the OI is a
4 consumer item and OI-Id provider is in a specific location;
5 a portable shopping assistant (PSA) for receiving the OI-Id in the specific location, for
6 transmitting the received OI-Id, and for receiving key information (OI-Key), the OI-
7 Key comprising a means for accessing consumer item information (P/S-Info)
8 concerning the OI;
9 an information server system (ISS) for receiving the OI-Id transmitted by the PSA, for
10 matching the received OI-Id with a record containing an OI-Key corresponding to the
11 received OI-Id, and for transmitting the OI-Key from the matching record to the PSA;
12 an input/output (I/O) device for receiving the OI-Key previously received by said PSA,
13 for transmitting the received OI-Key to access consumer item information (P/S-Info)
14 concerning the OI, and for accessing the P/S-Info; and
15 a P/S-Info server for receiving an OI-Key from said I/O device, for matching the received
16 OI-Key with a record containing the P/S-Info, and for allowing said I/O device to
17 access the P/S-Info;
18 wherein the specific location is one of a location where the OI is present, a location having
19 material associated with the OI, and a location where an event associated with the OI
20 is taking place.

1 29. The system of claim 28, wherein, in the location where an event associated with
2 the OI is taking place, the associated event comprises one of a concert, a lecture, and a sports
3 event.

1 30. The system of claim 28, wherein the PSA comprises one of a cellular telephone, a
2 personal digital assistant (PDA), a laptop computer, and a dedicated device.

1 31. The system of claim 28, wherein the PSA receives OI-Id by one of radio-
2 frequency (RF) communication, infrared (IR) communication, sonic communication, label
3 scanning and manual entry.

1 32. The system of claim 28, wherein the OI-Id comprises a consumer item
2 identification code.

1 33. The system of claim 28, wherein the PSA receives OI-Id by short-range, low
2 power radio-frequency (RF) technology.

1 34. The system of claim 33, wherein the short-range, low power RF technology
2 comprises one of Bluetooth technology, IEEE 802.16 technology, and HiperLAN technology.

1 35. The system of claim 28, wherein the PSA is a cellular telephone, further
2 comprising:

3 a cellular telephone network for receiving the OI-Id transmitted by said cellular telephone
4 and for transmitting the OI-Id to the ISS.

1 36. The system of claim 28, wherein the PSA is a cellular telephone, said cellular
2 telephone being registered to receive services of the consumer item information system by having
3 appropriate information entered in a file of a subscriber database maintained by a cellular
4 telephone system.

1 37. The system of claim 28, wherein the output device is one of a personal computer
2 at a home of the user, a television set at the home of the user, a portable laptop computer
3 equipped with communication means, and a set of portable virtual reality goggles.

1 38. The system of claim 28, wherein the PSA transmits the OI-Id by one of the
2 Internet, a wired telephone network, a broadcast network, a short-range, low power radio-
3 frequency (RF) technology, a wireless local area network (WLAN), and a cellular telephone
4 network.

1 39. The system of claim 38, wherein the broadcast network comprises one of a digital
2 audio broadcast (DAB) system, a digital video broadcast (DVB) system, a satellite system, a
3 microwave broadcast system, and a cable television system.

1 40. The system of claim 38, wherein the short-range, low power RF technology
2 comprises one of Bluetooth technology, IEEE 802.16 technology, and HiperLAN technology.

1 41. The system of claim 38, wherein the cellular telephone network comprises a third
2 generation cellular telephone network.

1 42. The system of claim 28, wherein the PSA communicates with the ISS and the P/S-
2 Info Server communicates with the I/O device using different communication networks.

1 43. The system of claim 28, wherein the P/S-Info Server and the I/O device maintain a
2 communication link by one of the Internet, a wired telephone network, a broadcast network, a

3 short-range, low power radio-frequency (RF) technology, a wireless local area network (WLAN),
4 and a cellular telephone network.

1 44. The system of claim 43, wherein the broadcast network comprises one of a digital
2 audio broadcast (DAB) system, a digital video broadcast (DVB) system, a satellite system, a
3 microwave broadcast system, and a cable television system.

1 45. The system of claim 43, wherein the short-range, low power RF technology
2 comprises one of Bluetooth technology, IEEE 802.16 technology, and HiperLAN technology.

1 46. The system of claim 43, wherein the cellular telephone network comprises a third
2 generation cellular telephone network.

1 47. The system of claim 43, wherein the one of the ISS and the P/S-Info Server
2 determines which one of the Internet, a wired telephone network, a broadcast network, a short-
3 range, low power radio-frequency (RF) technology, a wireless local area network (WLAN), and a
4 cellular telephone network.

1 48. The system of claim 28, wherein the OI-Key comprises a communication
2 destination address for the P/S-Info server.

1 49. The system of claim 48, wherein the communication destination address is an
2 Internet Protocol (IP) address.

1 50. The system of claim 28, wherein the OI-Key comprises the OI-Id.

1 51. The system of claim 28, wherein the OI-Key is manually input to the I/O device by
2 the user.

1 52. The system of claim 28, wherein the ISS comprises:
2 an OI-Key server having the record containing the OI-Key for receiving the OI-Id, for
3 matching the record containing the OI-Key to the received OI-Id, and for transmitting
4 the matched OI-Key to the PSA.

1 53. The system of claim 28, further comprising:
2 a cellular telephone network for transmitting the OI-Id to the ISS and transmitting the OI-
3 Key to the PSA.

1 54. The system of claim 28, wherein the P/S-Info server is on the Internet, the OI-Key
2 is transmitted to the P/S-Info server over the Internet, and the P/S-Info is transmitted to the I/O
3 device over the Internet.

1 55. The system of claim 28, further comprising:
2 a cellular telephone comprising the PSA;
3 a short message service (SMS) system connected to a cellular telephone system and to the
4 Internet, said cellular telephone being in a transmission area of said cellular telephone
5 system, said SMS system for receiving the OI-Id, and for transmitting a request for an
6 OI-Key corresponding to the received OI-Id; and

7 said OI-Key server having the record containing the OI-Key for receiving the request for
8 the OI-Key, for matching the record containing the OI-Key to said received OI-Id, and
9 for transmitting said OI-Key to the SMS system;
10 wherein the SMS system transmits the OI-Key to said cellular telephone.

1 56. A method for providing information concerning a consumer item to a user,
2 comprising the steps of:

3 receiving, in a portable shopping assistant (PSA), an identifier (OI-Id) having
4 identification information concerning an object of interest (OI), wherein the OI is a
5 consumer item and said receiving occurs in a specific location;

6 transmitting the OI-Id by the PSA to an information server system (ISS);

7 matching by the ISS of the OI-Id with a record containing consumer item information
8 (P/S-Info) concerning the OI;

9 determining which communication method to use to transmit the P/S-Info;

10 transmitting P/S-Info in the matching record to an output device, using the determined
11 communication method, said output device being separate from the PSA; and

12 outputting of the P/S-Info by the output device to the user;

13 wherein the specific location is one of a location where the OI is present, a location having
14 material associated with the OI, and a location where an event associated with the OI
15 is taking place.

1 57. The method of claim 56, wherein, in the location where an event associated with
2 the OI is taking place, the associated event comprises one of a concert, a lecture, and a sports
3 event.

1 58. The method of claim 56, wherein the step of transmitting the OI-Id to said ISS
2 comprises:

3 transmitting, by said PSA, a Short Message Service (SMS) message containing the OI-Id
4 to a base station of a cellular telephone network;

5 receiving, by a Short Message Service Center (SMSC) of said cellular network, said SMS
6 message containing the OI-Id; and

7 forwarding said processed message to the ISS.

1 59. The method of claim 56, wherein the step of matching by the ISS of the OI-Id with
2 the record containing the P/S-Info concerning the OI comprises:

3 resolving a correct destination address for a P/S-Info server which has the record
4 containing the P/S-Info;

5 transmitting a request for the P/S-Info to the P/S-Info Server; and

6 receiving the requested P/S-Info from the P/S-Info server.

1 60. The method of claim 56, wherein the PSA transmits the OI-Id by one of the
2 Internet, a wired telephone network, a broadcast network, a short-range, low power radio-
3 frequency (RF) technology, a wireless local area network (WLAN), and a cellular telephone
4 network.

1 61. The method of claim 58, wherein the broadcast network comprises one of a digital
2 audio broadcast (DAB) system, a digital video broadcast (DVB) system, a satellite system, a
3 microwave broadcast system, and a cable television system.

1 62. The method of claim 58, wherein the short-range, low power RF technology
2 comprises one of Bluetooth technology, IEEE 802.16 technology, and HiperLAN technology.

1 63. The method of claim 58, wherein the cellular telephone network comprises a third
2 generation cellular telephone network.

1 64. The method of claim 56, wherein the P/S-Info is transmitted by one of the
2 Internet, a wired telephone network, a broadcast network, a short-range, low power radio-
3 frequency (RF) technology, a wireless local area network (WLAN), and a cellular telephone
4 network.

1 65. The method of claim 64, wherein the broadcast network comprises one of a digital
2 audio broadcast (DAB) system, a digital video broadcast (DVB) system, a satellite system, a
3 microwave broadcast system, and a cable television system.

1 66. The method of claim 64, wherein the short-range, low power RF technology
2 comprises one of Bluetooth technology, IEEE 802.16 technology, and HiperLAN technology.

1 67. The method of claim 64, wherein the cellular telephone network comprises a third
2 generation cellular telephone network.

1 68. The method of claim 64, further comprising:

2 determining, by the ISS, which one of the Internet, a wired telephone network, a short-
3 range, low power radio-frequency (RF) technology, a wireless local area network
4 (WLAN), and a cellular telephone network is used to transmit the P/S-Info.

1 69. The method of claim 56, wherein the transmitting the OI-Id and the transmitting
2 the P/S-Info are performed using different communication networks.

1 70. The method of claim 56, wherein the output device is one of a personal computer
2 at a home of the user, a television set at the home of the user, a portable laptop computer
3 equipped with communication means, and a set of portable virtual reality goggles.

1 71. The method of claim 56, further comprising the steps of:
2 attaching user information (UID-Info) to the OI-Id, said UID-Info comprising at least a
3 communication destination address for the user;
4 wherein the communication destination address is used to address the P/S-Info to the
5 output device in the transmitting P/S-Info step.

1 72. The method of claim 71, wherein the step of attaching UID-Info is performed by
2 one of the PSA and the ISS.

1 73. The method of claim 56, wherein the step of transmitting the P/S-Info in the
2 matching record to an output device comprises:
3 determining a user identification (UID) of the user;

4 matching a user information (UID-Info) record in a UID-Info server with said determined
5 UID, where said UID-Info record comprises at least a communication destination
6 address for the output device; and
7 transmitting the P/S-Info to the communication destination address in the matching UID-
8 Info record.

1 74. The method of claim 56, further comprising:
2 maintaining records at the ISS with information indexed to each user, said indexed
3 information being used by the ISS in determining the communication method.

1 75. The method of claim 56, further comprising:
2 maintaining records concerning PSAs currently requesting P/S-Info and output devices
3 corresponding to the requesting PSAs; and
4 broadcasting particular P/S-Info to output devices in a specific broadcasting area when a
5 number of output devices in the specific broadcasting area corresponding to PSAs
6 requesting particular P/S-Info exceeds a predetermined threshold value.

1 76. A method for providing information concerning a consumer item to a user,
2 comprising:
3 receiving, in a portable shopping assistant (PSA), an identifier (OI-Id) having
4 identification information concerning an object of interest (OI), wherein the OI is a
5 consumer item and said receiving occurs in a specific location;
6 transmitting the OI-Id by the PSA to an information server system (ISS);

7 matching by the ISS of the OI-Id with a record containing key information (OI-Key), the
8 OI-Key comprising a means for accessing consumer item information (P/S-Info)
9 concerning the OI;
10 transmitting by the ISS to the PSA of the OI-Key of the matching record;
11 inputting the OI-Key from the PSA to an input/output (I/O) device;
12 transmitting by the I/O device of the OI-Key to a P/S-Info server having a record
13 containing the P/S-Info concerning the OI;
14 matching at the P/S-Info server of the OI-Key with a record containing the P/S-Info; and
15 allowing the I/O device to access the P/S-Info in the matching record;
16 wherein the specific location is one of a location where the OI is present, a location having
17 material associated with the OI, and a location where an event associated with the OI
18 is taking place.

1 77. The method of claim 76, wherein, in the location where an event associated with
2 the OI is taking place, the associated event comprises one of a concert, a lecture, and a sports
3 event.

1 78. The method of claim 76, wherein the step of transmitting the OI-Id by the PSA to
2 the ISS comprises:
3 transmitting by the PSA a Short Message Service (SMS) message containing the OI-Id to a
4 base station of a cellular telephone network;

5 receiving and processing, by a Short Message Service Center (SMSC) of said cellular
6 network, said SMS message containing the OI-Id; and
7 forwarding the processed message to the ISS.

1 79. The method of claim 76, wherein the PSA comprises a cellular telephone and the
2 step of transmitting by the ISS to the PSA of the OI-Key comprises:

3 receiving, by a Short Message Service Center (SMSC) of a cellular telephone network, the
4 OI-Key;
5 creating an SMS message containing the received OI-Key; and
6 transmitting the created SMS message containing the OI-Key from a base station of the
7 cellular telephone network to the PSA.

1 80. The method of claim 76, wherein the step of inputting the OI-Key from the PSA to
2 the I/O device comprises:

3 manually entering, by the user, the OI-Key.

1 81. The method of claim 76, wherein the step of inputting the OI-Key from the PSA to
2 the I/O device comprises:

3 downloading the OI-Key from the PSA to the I/O device.

1 82. The method of claim 76, wherein the OI-Key comprises an Internet Protocol (IP)
2 address of the P/S-Info server and the step of electronically transmitting by the I/O device of the
3 OI-Key to the P/S-Info server comprises:

4 transmitting an Internet Protocol (IP) message over the Internet to the IP address in the OI-
5 Key.

1 83. The method of claim 82, wherein the OI-Key comprises a key code and the step of
2 matching at the P/S-Info server of the OI-Key with the record containing the P/S-Info comprises:
3 starting a Transport Control Protocol (TCP) session between the I/O device and the P/S-
4 Info server;
5 sending, in the TCP session, said key code in the OI-Key to the P/S-Info server; and
6 matching the key code with the record containing the P/S-Info.

1 84. The method of claim 76, wherein the output device is one of a personal computer
2 at a home of the user, a television set at the home of the user, a portable laptop computer
3 equipped with communication means, and a set of portable virtual reality goggles.

1 85. The method of claim 76, wherein the PSA transmits the OI-Id by one of the
2 Internet, a wired telephone network, a broadcast network, a short-range, low power radio-
3 frequency (RF) technology, a wireless local area network (WLAN), and a cellular telephone
4 network.

1 86. The method of claim 85, wherein the broadcast network comprises one of a digital
2 audio broadcast (DAB) system, a digital video broadcast (DVB) system, a satellite system, a
3 microwave broadcast system, and a cable television system.

1 87. The method of claim 85, wherein the short-range, low power RF technology
2 comprises one of Bluetooth technology, IEEE 802.16 technology, and HiperLAN technology.

1 88. The method of claim 85, wherein the cellular telephone network comprises a third
2 generation cellular telephone network.

1 89. The method of claim 76, wherein the PSA communicates with the ISS and the P/S-
2 Info Server communicates with the I/O device using different communication networks.

1 90. The method of claim 76, wherein the P/S-Info Server and the I/O device maintain
2 a communication link by one of the Internet, a wired telephone network, a broadcast network, a
3 short-range, low power radio-frequency (RF) technology, a wireless local area network (WLAN),
4 and a cellular telephone network.

1 91. The method of claim 90, wherein the broadcast network comprises one of a digital
2 audio broadcast (DAB) system, a digital video broadcast (DVB) system, a satellite system, a
3 microwave broadcast system, and a cable television system.

1 92. The method of claim 90, wherein the short-range, low power RF technology
2 comprises one of Bluetooth technology, IEEE 802.16 technology, and HiperLAN technology.

1 93. The method of claim 90, wherein the cellular telephone network comprises a third
2 generation cellular telephone network.

1 94. The method of claim 90, further comprising:

2 determining, by one of the ISS and the P/S-Info Server, which one of the Internet, a wired
3 telephone network, a short-range, low power radio-frequency (RF) technology, a
4 wireless local area network (WLAN), and a cellular telephone network is used to
5 transmit the P/S-Info.

1 95. A portable shopping assistant for providing information concerning a consumer
2 item to a user, comprising:

3 a receiver unit for receiving an identifier (OI-Id) having identification information
4 concerning an object of interest (OI), the OI-Id being received in a specific location;

5 at least one memory unit for storing processor-readable code and for storing selectable
6 output device information comprising communication destination addresses of each of
7 a plurality of output devices;

8 a processor operatively coupled to said at least one memory, said processor configured
9 to implement said processor-readable code, said processor-readable code configured
10 to:

11 maintain the selectable output device information;

12 allow the user to select selectable output device information comprising a
13 communication destination address of a user desired output device; and

14 attach the user-selected selectable user information to the received OI-Id; and

15 a communication unit for communicating with a network for transmitting the OI-Id with
16 the attached user-selected output device information to an information server system
17 (ISS) via the network;

18 wherein the ISS, after receiving the OI-Id transmitted by said portable shopping assistant
19 via the network, matches the received OI-Id with a record containing corresponding
20 consumer item information (P/S-Info), determines a communication path to be used in
21 transmitting the P/S-Info, and transmits the P/S-Info contained in the matching record
22 to the user desired output device using the user-selected output device information
23 attached to the OI-Id.

1 96. The portable shopping assistant of claim 95, wherein the portable shopping
2 assistant is a cellular telephone, said cellular telephone being registered to receive services of the
3 consumer item information system by having appropriate information entered in a file of a
4 subscriber database maintained by a cellular telephone system.

1 97. The portable shopping assistant of claim 96, wherein the portable shopping
2 assistant transmits the OI-Id by one of the Internet, a wired telephone network, a short-range, low
3 power radio-frequency (RF) technology, a wireless local area network (WLAN), and a cellular
4 telephone network.

1 98. The portable shopping assistant of claim 97, wherein the short-range, low power
2 RF technology comprises one of Bluetooth technology, IEEE 802.16 technology, and HiperLAN
3 technology.

1 99. The portable shopping assistant of claim 97, wherein the cellular telephone
2 network comprises a third generation cellular telephone network.

1 100. The portable shopping assistant of claim 95, wherein the ISS server stores
2 information indexed to each user, said indexed information being used by the ISS in determining
3 the communication method.

1 101. The portable shopping assistant of claim 95, wherein the ISS maintains records
2 concerning portable shopping assistants requesting P/S-Info and output devices corresponding to
3 the requesting portable shopping assistants, and broadcasts particular P/S-Info to output devices in
4 a specific broadcasting area when a number of output devices in the specific broadcasting area
5 corresponding to portable shopping assistants requesting particular P/S-Info exceeds a
6 predetermined threshold values.